TERMS OF REFERENCE
RTCA Special Committee 245
Minimum Performance Standards for Distance Measuring Equipment (DME) Interrogators
Rev 1

SPECIAL COMMITTEE LEADERSHIP:

Position	Name	Affiliation	Telephone	email	Change
Chair	Ted Peterson	Collins Aerospace	321-674-5227	Ted.Peterson@collins.com	
Government Authorized Representative	Hamza Abduselam	FAA/AIR-626B	202-267-8625	Hamza.abduselam@faa.gov	New
Secretary	**TBD**	**TBD**	**TBD**	**TBD**	

BACKGROUND:

DO-189 - *Minimum Operational Performance Standards for Airborne Distance Measuring Equipment (DME*) *Operating within the Radio Frequency Range of 960-1215 MHz* and ED-54 - *Minimum Operational Performance Requirements (MOPR) for Distance Measuring Equipment (DME) interrogator (DME/N and DME/P) operating within the Radio Frequency range 960 to 1215 MHz* are harmonized standards that define the technical specifications and operational limits, such as maximum range and search speed, for DME equipment to ensure interoperability and safety across international airspace. Regulatory bodies like the Federal Aviation Administration (FAA) and the European Union Aviation Safety Agency (EASA) use them as a basis for technical standard orders (TSOs) and certification. For example, DO-189 is one means of compliance for FAA TSO-C66c.

DO-189 and ED-54 were published in 1985 and 1987, respectively. They require updates to reflect (1) the technological evolution and higher performance seen in current day DME interrogators, (2) to support DME data consumers such as Flight Management Systems (FMS), and to ensure that DME navigation is a suitable alternative to Global Navigation Satellite System (GNSS) given the increasing concern with jamming and spoofing.

PRODUCT DELIVERABLES:

Product	Description	FRAC Completion Due Date*	FRAC or RAC	Projected Publication Date**	Change
Minimum Operational Performance Standards for Airborne Distance Measuring Equipment (DME) Operating within the Radio Frequency Range of 960-1215 MHz **(DO-XXX)**	Update DO-189/ED-54 to be a joint standard with EUROCAE WG-134 for airborne DME interrogators.	**July 2027**	**FRAC**	**September 2027**	

SCOPE and COORDINATION:

The committee will update the minimum requirements to establish a consolidated standard that enables the current set of DME airborne interrogators to support improved levels of RNP with higher availability

The committee should explore additional new DME signaling that can augment/overlay the existing DME signaling/ system architecture to help achieve better terrestrial radio nav system resiliency, integrity and continuity whilst taking into account the need to develop spectrally efficient and resilient DME interrogator standards.

ENVISIONED USE OF DELIVERABLES:
Key users of these documents include avionics equipment manufacturers, ground transponder manufacturers, aircraft manufacturers, aviation authorities, ATM/ANS providers. Regulatory bodies like the FAA and EASA will use them as a basis for TSOs and certification.

SPECIFIC GUIDANCE:

This SC is directed to work with EUROCAE WG-134 to create technically equivalent MOPS at EUROCAE and RTCA.

Initial Documentation:

Documents	**Intended Use**
ED-54	Basis for new MOPS
DO-189	Basis for new MOPS

TERMINATION:
When the scope of this Terms of Reference is complete, the committee will recommend to the PMC that the committee Sunset, go into Active Monitoring Mode, or spend a period of time in Hiatus. Any change/extension of the committee's work program requires prior PMC approval.